APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,329	11/26/2003	Mikhail Arkhipov	13768.466	9473

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EXAMINER
RUTLEDGE, AMELIA L

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 April 2006_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15 and 25-37_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-15 and 25-37_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Amendment, filed 04/25/2006.

2.   Claims 1-15 and 25-37 are pending in the case. Claims 1, 9, 25, and 32 are

independent claims. Claims 16-24 have been cancelled.

3.   Claims 8, 13, 31, and 36 have been amended to overcome the previous

rejections under 35 U.S.C. 112, second paragraph, which are therefore withdrawn.

4.   The amendments to the Specification filed 04/25/2006 correct minor

typographical errors and are accepted.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 26-31 and 33-37 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

7.   Dependent claims 26-31 recite the limitations, for example, *A computer program*

product as recited in claim 25 (claim 26). There is insufficient antecedent basis for this

limitation in the claims since claims 26-31 depend from their parent claim, independent

claim 25 which has been amended to recite a method and no longer claims a computer

program product.

8.   Similarly, dependent claims 33-37 recite the limitations *A computer program*

product which lack antecedent basis in the parent claim, independent claim 32 which

has similarly been amended to recite a method and no longer claims a computer

program product.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10.   Claims 1-15 and 25-37 are rejected under 35 U.S.C. 102(e) as being

anticipated by Chan et al. (hereinafter "Chan"), U.S. Patent No. 6,799,718 issued

October 2004.

Regarding independent claim 1, Chan teaches an integrated development

environment (IDE) for editing multilanguage documents (Abstract). Chan teaches

accessing and editing a multilanguage file with a plurality of segments written in

different programming languages (Col. 2, I. 52-Col. 3, I. 63), using secondary scanner

and parser programs (Col. 7, I. 31-50 and Col. 8, I. 1-25). Chan teaches presenting the

multilanguage file in a primary application view that includes the plurality of code

segments (Fig. 5; Col. 8, I. 60-Col. 9, I. 56). Chan teaches enabling a user to edit the

different segments from within the primary view, and teaches a text editor and user

interface integrated with the primary scanner and at least one supplemental scanner

(claims 31 and 32). Chan teaches a system for performing and tracking edits, and

providing advanced editing functions, such as error detection, for sections of code for

each of the various languages using secondary editors including parsers, scanners,

converters, buffers, and engines (claims 10, 19, 20, 28, 34) to perform the editing

functions for each language, mapped back to the main file M of the primary view (col. 8,

l. 60-col. 9, l. 56; Fig. 5); compare to *without requiring the programmer to leave the*

primary application view to open or interface with the secondary editors, enabling the

programmer to edit the different code segments of the multilanguage document from

within the primary application view by editing code segments written in the primary

language with the primary editor, and

by sending the at least one other code segment written in secondary

programming language to one of the secondary editors so that thereafter, edits made in

the primary application view will be performed by the secondary editor even though the

programmer is working on the multilanguage document only in the primary application

view.

Regarding dependent claims 2-3, Chan teaches that code for each language is

parsed and stored separately (Col. 9, l. 16-56; Col. 7, l. 31-50 and Col. 8, l. 1-25), i.e.,

replicating secondary code languages to a secondary document. Chan teaches a

mapping between the working files and the primary file (Col. 7, l. 31-50 and Col. 8, l. 1-

25). Chan teaches a system for performing and tracking edits, and providing advanced

editing functions, such as error detection, for sections of code for each of the various

languages using secondary editors including parsers, scanners, converters, buffers, and

engines (claims 10, 19, 20, 28, 34) to perform the editing functions for each language,

mapped back to the main file M of the primary view (col. 8, l. 60-col. 9, l. 56; Fig. 5).

Figure 5 shows how the edits are replicated to the secondary documents.

Regarding dependent claim 4, Chan teaches that the Chan teaches that code

for each secondary language is parsed and stored separately (Col. 9, l. 16-56), in

documents that are transparent, i.e., not visible to the user (col. 8, l. 31-59).

Regarding dependent claim 5, Chan teaches that code for the secondary

documents may or may not require conversion from text format (Col. 7, l. 31-50 and Col.

8, l. 1-25) and that unconverted code is accumulated into a working file or buffer.

Regarding dependent claim 6, Chan teaches a mapping between working files

and the primary file (Col. 7, l. 31-50 and Col. 8, l. 1-25; Fig. 5), and thus it is inherent in

the disclosure of Chan that such a mapping would enable the primary editor to modify

the multilanguage file in response to a change made to the secondary document, since

the files were linked and updated.

Regarding dependent claim 7, Chan teaches that the primary file may be

modified in response to advanced editing features of the secondary editor that are not

inherently enabled by the primary editor, for example, using a Java Completion engine

to modify code segments (Col. 12, l. 29-49).

Regarding dependent claim 8, Chan teaches syntax coloring (Col. 5, l. 64-65).

Regarding independent claim 9 Chan teaches an integrated development

environment (IDE) for editing multilanguage documents (Abstract). Chan teaches

accessing and editing a multilanguage file with a plurality of segments written in

different programming languages (Col. 2, l. 52-Col. 3, l. 63), using secondary scanner

and parser programs (Col. 7, l. 31-50 and Col. 8, l. 1-25). Chan teaches presenting the

multilanguage file in a primary application view that includes the plurality of code

segments (Fig. 5; Col. 8, l. 60-Col. 9, l. 56). Chan teaches enabling a user to edit the

different segments from within the primary view, and teaches a text editor and user

interface integrated with the primary scanner and at least one supplemental scanner

(claims 31 and 32). Chan teaches a system for performing and tracking edits, and

providing advanced editing functions, such as error detection, for sections of code for

each of the various languages using secondary editors including parsers, scanners,

converters, buffers, and engines (claims 10, 19, 20, 28, 34) to perform the editing

functions for each language, mapped back to the main file M of the primary view (col. 8,

l. 60-col. 9, l. 56; Fig. 5). Chan teaches a mapping between working files and the

primary file (Col. 7, l. 31-50 and Col. 8, l. 1-25; Fig. 5), and thus it is inherent in the

disclosure of Chan that such a mapping would enable the primary editor to modify the

multilanguage file in response to a change made to the secondary document, since the

files were linked and updated. Chan teaches providing completion assistance for both

primary and secondary programming languages via the primary view (col. 11, l. 46-col.

12, l. 29); compare to *identifying whether the at least one other code segment written in*

a secondary programming language is a complete code segment, and if not,

supplementing the at least one other code segments with additional data necessary to

create complete source code for the at least one other code segment, so that it can be

recognized and edited by the secondary editor for the language of the at least one other

code segment. Chan teaches that the primary editor modifies the primary application

view to accommodate for the editing functionality provided by the secondary editors for

the code segments in the secondary languages (col. 7, l. 17-51).

Regarding dependent claim 10, Chan teaches a menu in the primary

application view created by the secondary completion engine, which is a completion

assistance menu (Fig. 1, Col. 5, l. 25-37; Col. 12, l. 1-16).

Regarding dependent claims 11 and 12, Chan teaches that code for each

language is parsed and stored separately (Col. 9, l. 16-56; Col. 7, l. 31-50 and Col. 8, l.

1-25), i.e., replicating secondary code languages to a secondary document. Chan

teaches a mapping between the working files and the primary file (Col. 7, l. 31-50 and

Col. 8, l. 1-25), and it is inherent in the teaching of Chan that such a mapping would

enable the primary editor to replicate and modify the multilanguage file in response to a

change made to the secondary document, since the files were linked. Chan teaches

that the functionality provided by the secondary editors are not available to the primary

editor, since Chan teaches the use of registered completion engines called from the IDE

(col. 11, l. 46-col. 12, l. 67).

Regarding dependent claim 13, claim 13 is directed toward substantially similar

subject matter as claimed in dependent claim 8, and is rejected along the same

rationale.

Regarding dependent claims 14 and 15, Chan teaches a method of tracking

the sections of code for the various languages by using mapping between buffers and

the main file, i.e., primary document. The mapping function translates the structural and

error information between the buffered code and the primary document (Col. 9, l. 16-

63). It was inherent in the teaching of Chan that such a mapping would determine the validity edits and avoid replication, since the mapping enabled tracking of code position and changes in code between the primary document and the working files.

Claims 16-24 have been cancelled.

Regarding independent claim 25 and dependent claims 26-31, claims 25-31 reflect the computer program product used to implement the methods claimed in independent claim 1 and dependent claims 2-4 and 6-8, respectively, and are rejected along the same rationale.

Regarding independent claim 32 and dependent claims 33-36, claims 32-36 reflect the method and computer program product used to implement the methods claimed in independent claim 9 and dependent claims 10-12 and 13, respectively, and are rejected along the same rationale.

Regarding dependent claim 37, Chan teaches a method of tracking the sections of code for the various languages by using mapping between buffers and the main file, i.e., primary document. The mapping function translates the structural and error information between the buffered code and the primary document (Col. 9, l. 16-63). It was inherent in the disclosure of Chan that such a mapping would determine the validity edits and avoid an infinite loop of replication, since the mapping enabled tracking of code position and changes in code between the primary document and the working files.

Response to Arguments

11.   Applicant's arguments filed 04/25/2006 have been fully considered but they are

not persuasive. Applicant has amended the independent claims to add the limitations

without requiring the programmer to leave the primary application view to open or

interface with the secondary editors, enabling the programmer to edit the different code

segments of the multilanguage document from within the primary application view by

editing code segments written in the primary language with the primary editor, and

by sending the at least one other code segment written in secondary

programming language to one of the secondary editors so that thereafter, edits made in

the primary application view will be performed by the secondary editor even though the

programmer is working on the multilanguage document only in the primary application

view. (Claim 1)

Applicant argues that the Dreamweaver reference relied upon in the rejections of

the previous Office Action mailed 03/06/2006 does not teach the newly claimed

limitations (Remarks, p. 17). The examiner agrees. However, it is the examiner's

opinion that Chan does teach the newly claimed limitations, since Chan teaches a

system for performing and tracking edits, and providing advanced editing functions,

such as error detection, for sections of code for each of the various languages using

secondary editors including parsers, scanners, converters, buffers, and engines (claims

10, 19, 20, 28, 34) to perform the editing functions for each language, mapped back to

the main file M of the primary view (col. 8, l. 60-col. 9, l. 56; Fig. 5); and Chan teaches

enabling a user to edit the different segments from within the primary view, and teaches

a text editor and user interface integrated with the primary scanner and at least one

supplemental scanner (claims 31 and 32).

In the rejections of the previous Office Action mailed 03/06/2006, the examiner

stated that "Chan does not explicitly teach one or more secondary editors that are each

configured to edit code written in a particular programming language" (Office Action, p.

4). As previously claimed in the original claims filed 11/26/2003, claim 1 cited:

A method for editing multilanguage documents with a primary editor and one or more
secondary editors, and in such a way that the primary editor leverages functionality from
the secondary editors, the method comprising:
   accessing a multilanguage file having a plurality of segments that are written in
different programming languages, the segments corresponding to one or more
secondary editors that are each configured to edit code written in a particular
programming language, respectively;
   presenting the multilanguage file in a primary application view that is visible to a
user and that includes the plurality of segments; and
   enabling a user to edit the different segments of the multilanguage file from within
the primary application view, and in such a way that during editing of any particular
segment a secondary editor corresponding to the particular segment is utilized by the
primary editor to modify the multilanguage file.

The examiner at that time interpreted the claimed secondary editors as editing

applications each having an interface for editing the document, and correspondingly

relied on the Dreamweaver reference to teach the use of secondary editors launched

from a primary editor. However, since the claims have now been amended to claim

without requiring the programmer to leave the primary application view to open or

interface with the secondary editors, it is the examiner's opinion that the parsers,

scanners, converters, buffers, and engines (claims 10, 19, 20, 28, 34) used to perform

the editing functions for each language, mapped back to the main file M of the primary

view (col. 8, l. 60-col. 9, l. 56; Fig. 5) disclosed by Chan, disclose secondary editors

providing editing functionality for multiple programming languages, without requiring a separate editing interface. Therefore the rejections for the amended claims have been changed accordingly.

Conclusion

12.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia Rutledge whose telephone number is 571-272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AR

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